

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

FACT SHEET

tentative ORDER NO. R9-2004-0111

NPDES PERMIT NO. CA0108952

WASTE DISCHARGE REQUIREMENTS

FOR

SWEETWATER AUTHORITY
LOWER SWEETWATER RIVER BASIN
GROUNDWATER DEMINERALIZATION PLANT

SAN DIEGO COUNTY

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Attachments

Attachment A: Map of Production Well Locations

Attachment B: Location Map of Facility

Contact Information

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Background

The Sweetwater Authority is a domestic water purveyor serving customers in the cities of Chula Vista and National City and the unincorporated area of Bonita in southern San Diego County. On June 7, 1999, this Regional Board adopted Order No. 99-30, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0108952, for the discharge of up to 0.800 million gallons per day (mgd) of brine concentrate from the Lower Sweetwater River Basin Groundwater Demineralization Plant (Demineralization Plant) to the Upper Paradise Creek Flood Control Channel, a tributary to the Sweetwater River and San Diego Bay.

On January 6, 2000 the Demineralization Plant was placed in service and began operation pursuant to Order No. 99-30. The Demineralization Plant uses reverse osmosis process to demineralize approximately 4.0 mgd of groundwater from four alluvial groundwater wells, and six San Diego Formation groundwater extraction/injection wells. As noted in *Attachment A, Production Wells*, the production wells are located near the demineralization facility or up stream along the Sweetwater River, an ephemeral freshwater river. The facility has eight groundwater monitoring wells, soil moisture sensors, and three stream gages to monitor the effects from the groundwater extraction.

On May 10, 2000, this Regional Board adopted Addendum No. 1 to Order No. 99-30, NPDES Permit No. CA0108952, for the discharge of intermittent and infrequent discharges associated

with the Demineralization Plant. The additional discharges are from groundwater well-purge water, plant feed-water dump, pressure (air) relief valves, and chlorine contact-tank overflow.

Purpose Of Order

The tentative Order will regulate the discharge of brine water from the Demineralization Plant and the incidental discharges associated with the facility, such as, groundwater well-purge water, plant feed-water dump, pressure (air) relief valves, and chlorine contact-tank overflow.

Facility Description

The Demineralization Plant is located at 3066 North Second Avenue, Chula Vista, and demineralizes groundwater by using a cartridge filter and reverse osmosis system. The brine concentrate from the reverse osmosis processing system discharges through a 14-inch diameter pipe to the existing concrete-lined Upper Paradise Creek Flood Control Channel at latitude 32° 39' 34" north and longitude 117° 05' 00" west. The Upper Paradise Creek Flood Control Channel conveys the brine concentrate to the Sweetwater River at latitude 32° 39' 31" north and longitude 117° 05' 02" west, a location in the tidal prism of the Lower Sweetwater River. The Upper Paradise Creek Flood Control Channel and the Lower Sweetwater River are located in the La Nacion Hydrologic Subarea (909.12) of the Sweetwater Hydrologic Unit (909.00). (See map in *Attachment B*.) The receiving water for the brine discharge is the portion of the Sweetwater River that is in the tidal prism of San Diego Bay.

The reverse osmosis process is used to demineralize the brackish groundwater from the alluvial aquifer and San Diego Formation wells. The feed-water from the wells is a mixture of water from both well sources. One San Diego Formation well is always in operation to provide water to blend with treated (permeate) water. To satisfy the Department of Health Services, Surface Water Treatment Rule, all alluvial well water is routed through the reverse osmosis membrane. The brine concentrate discharge to the Upper Paradise Creek Flood Control Channel is designed to have a maximum flow of 0.800 mgd, the maximum flow allowed pursuant to the tentative Order. During the past four years of operation of the facility, the average daily flow has been approximately 0.400 mgd.

The groundwater well-purge water discharges are located include a total of eight discharge locations, seven to the Lower Sweetwater River and one to the Upper Paradise Creek Flood Control Channel. The discharges from the ten groundwater wells are intermittent discharges.

The groundwater well-purge water discharges occur when an inactive well is activated. Inactive groundwater wells need to be purged due to operational requirements (such as, to eliminate sand from the well casing) at the Demineralization Plant. During normal operation of the Demineralization Plant, a groundwater well will remain on-line for several months before deactivation. Start-up of the wells and therefore any discharge from the wells occur once or twice per year. Mechanical problems and/or non-compliance (such as, loss of vegetation because of the ground water withdrawals) with the *Mitigation and Monitoring Program* for the Demineralization Plant may necessitate more frequent well deactivations. (The *Mitigation and*

Monitoring Program is explained in this Fact Sheet on page 9, *CEQA and Administrative Requirements* section.) Subsequently, the groundwater well-purge water discharges may occur more frequently than once or twice per year.

Discharge Description

There are nine discharge outfalls for five types of operational discharges from the facility. The discharge types are demineralization brine, groundwater well-purge water, plant feed-water dump, pressure (air) relief valves, and chlorine contact-tank overflow.

The location and description for each of the outfalls are listed in *Table 1. Outfall Locations and Descriptions*. The flow rates for groundwater well-purge water from the San Diego Formation Wells (SDFW), and the Alluvial Wells (AW), the plant feed-water dump, the pressure (air) relief valves, and the chlorine contact-tank overflow are intermittent discharges and are listed in Table 1 as gallons per minute (gpm).

Brine Concentrate

The flow rate for the Demineralization Plant brine concentrate discharge is listed as million gallons per day (mgd). The brine concentrate discharge occurs daily and continuously when the plant is operating.

Groundwater Well-purge Water

The duration for the groundwater well-purge water discharges is approximately 10 minutes. The frequency for each groundwater well-purge water discharge is approximately once or twice a year for each well.

Plant Feed-water Dump

The plant feed-water dump (the manifold supplying the reverse osmosis process trains) occurs if one or more of the reverse osmosis process trains are not in operation or at start-up of the process trains. At a maximum, the plant feed-water dump discharge is expected to occur once a month. With one train off-line 0.65 million gallons would be discharged over 12 hours at an average flow of approximately 900 gpm. If all three process trains went off line, 2.5 million gallons would be discharged over 12 hours at a maximum flow of 3,500 gpm. The plant feed-water dump discharge is an intermittent discharge that occurs on average two or three times per year. The discharge consists of the groundwater treated with a small amount of anti-scalant and acid to adjust the pH to a range of 6.6 to 7.0. During any emergency deactivation of the process trains the chemical feed pumps would be shut-off. During start-up of the process trains, the plant feed-water dump overflow occurs for approximately 15 minutes to allow the pH to stabilize. The plant feed-water dump overflow discharge is located at the Demineralization Plant.

Pressure (Air) Relief Valve, and Chlorine Contact-tank Overflow

The pressure (air) relief valve may discharge when the pipeline delivering water to the demineralization plant is vacated and refilled. The chlorine contact-tank overflow discharge has not occurred and is listed as a potential discharge that may occur if the water stored in the potable water tank is not suitable for distribution.

Table 1. Outfall Locations and Descriptions.

Outfall Number	Latitude	Longitude	Description
1	32°39'31"	117°05'02"	Storm water runoff (flood control channel) Chlorine contact-tank overflow, 1719 gpm Pressure (air) relief valves, 400 gpm Plant feed-water dump, 900 gpm SDFW #1, 930 gpm SDFW #2, 360 gpm
2	32°39'29"	117°04'41"	SDFW #3, 330 gpm
3	32°39'26"	117°04'36"	SDFW #4, 780 gpm
4	32°39'25"	117°04'31"	SDFW #5, 250 gpm
5	32°39'26"	117°04'09"	AW #1, 300 gpm
6	32°39'20"	117°04'01"	AW #2, 120 gpm
7	32°39'12"	117°03'57"	AW #3, 120 gpm
8	32°39'04"	117°03'48"	AW #4, 400 gpm
9	32°39'34"	117°05'00"	Demineralization Brine, 0.800 mgd

Rationale for Technology-Based Effluent Limitations

The discharges at this facility do not have *Technology-based Effluent Limitations*.

Rationale for Water Quality-Based Effluent Limitations (WOBEL)

The U.S. EPA promulgated the California Toxic Rule (CTR) on May 18, 2000, as required by Section 303(c)(2)(B) of the federal Clean Water Act. The CTR regulations, codified in 40 CFR 131, establish water quality standards for inland surface waters and bays and estuaries. The water quality criteria established in the CTR are legally applicable in the State of California for inland surface waters, and enclosed bays and estuaries for all purposes and programs under the Clean Water Act.

On March 2, 2000, the State Board, in Resolution No. 2000-15, adopted the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Implementation Policy). The Implementation Policy implements the provisions promulgated by the U.S. Environmental Protection Agency in the California Toxic Rule (CTR).

Pursuant to section 1.3 of the Implementation Policy, a reasonable potential analysis (RPA) of effluent and receiving water data is required to determine which priority pollutants would require effluent limitations. From the RWD and from the discharger's monitoring data, the copper levels in each of the various discharges were at concentrations exceeding receiving water quality criterion for copper as dissolved, i.e. greater than 3.1 µg/L (saltwater) or 9.0 µg/L (freshwater).

The discharges from the groundwater well-purge water, plant feed-water dump, pressure (air) relief valves, and chlorine contact-tank overflow are intermittent and short duration. During the reasonable potential analysis of these discharges it was noted that copper concentrations are higher than receiving water criteria, but because of the intermittent and short duration these discharges are not considered to have a reasonable potential to cause an exceedence of water quality criteria. The tentative Order does not include effluent limitations for these discharges. However, monitoring of these discharges is required.

The brine concentrate discharge is a continuous discharge. During the reasonable potential analysis review of the chemical concentrations in the discharge it was noted that copper may cause an exceedence of receiving water quality criteria. The tentative Order includes WQBEL for copper for the brine concentrate discharge.

The Implementation Policy requires that discharge effluent limitations be specified as total recoverable concentrations and converted to dissolved concentration for determining compliance with water quality criteria. Effluent limitations as a total recoverable concentration are also required by 40 CFR 122.45(c). The tentative Order includes effluent limitations as a total recoverable concentration for the brine concentrate discharge.

The Implementation Policy (p. 12, section 1.4.1, *Translators for Metals and Selenium*) specifies the use of a conversion factor to adjust a criterion expressed as a dissolved form to a total recoverable form. The CTR specifies the use of a conversion factor of 0.83 for saltwater and 0.96 for freshwater. To calculate the total recoverable concentration the dissolved criterion is divide by the conversion factor.

$$\text{Dissolved concentration criterion} / 0.83 = \text{Total recoverable concentration.}$$

The total recoverable concentrations for copper provided for by the Implementation Policy and the CTR for a criterion continuous concentration are calculated below:

$$3.1 \mu\text{g/L} / 0.83 = 3.73 \mu\text{g/L} \text{ (total recoverable criterion, saltwater),}$$

$$9.0 \mu\text{g/L} / 0.96 = 9.38 \mu\text{g/L} \text{ (total recoverable criterion, freshwater).}$$

Monitoring conducted within the receiving water has shown that the copper concentration in the receiving water has also exceeded water quality criteria. On January 20, 2004 the receiving water upstream of the brine discharge to the Sweetwater River, yet still in the tidal prism of San Diego Bay, had a copper concentration of 26 $\mu\text{g/L}$ as total recoverable. The tentative Order includes effluent limitations as total recoverable for copper from the brine concentrate discharge to the Lower Sweetwater River, a tidal prism of San Diego Bay, as 3.73 $\mu\text{g/L}$.

The maximum daily limit for mass loading rate for copper is 0.025 pounds/day. The maximum daily limit for mass loading rate is calculated by multiplying the daily flow times the conversion factor of 8.34 rate times the concentration (in parts per million).

$$\text{Pounds/day} = 0.800 \text{ mgallons/day} * 8.34 \text{ pounds/gallon} * 0.00373 \text{ parts/million}$$

Pursuant to section 1.4.1 of the Implementation Policy, the discharger may request to conduct a *Metals Translator Study* to determine if the CTR conversion factor value for copper concentrations or an alternative conversion factor value should be applied to the WQBEL for the brine discharges. The discharger must (1) commit to (a) completing a defensible site-specific translator study and (b) proposing a dissolved to total recoverable translator and (2) describe the methods to be used in developing the translator prior to the adoption of the tentative Order. The discharger may use the guidance specified in *The Metal Translator: Guidance for Calculation a Total Recoverable Permit Limit from a Dissolved Criterion*, EPA 823-B-96-007, June 1996, or an equivalent study format.

Any metal translator applied to the discharge would be a site-specific translator. Upon evaluation of the proposed dissolved to total recoverable translator, the tentative Order may be modified by the Regional Board. The Implementation Policy and the CTR allow the use of alternative conversion factors for discharges.

The tentative Order includes a 2-year interim effluent limitation of 3.1 $\mu\text{g/L}$ for copper as dissolved concentration provided the discharger submits a request to conduct a translator study. The interim effluent limitation is based on best professional judgment and the current Order's limitation. The tentative Order allows the discharger 2-years to conduct a translator study to develop an alternative conversion factor for the discharge of copper.

The interim maximum daily limit for mass loading rate for copper is 0.021 pounds/day. The interim maximum daily limit for mass loading rate is calculated by multiplying the daily flow times the conversion factor of 8.34 rate times the concentration (in parts per million).

$$\text{Pounds/day} = 0.800 \text{ mgallons/day} * 8.34 \text{ pounds/gallon} * 0.0031 \text{ parts/million}$$

Other metals identified by Order No. 99-30 with a potential to cause an exceedence of the receiving water quality criteria include arsenic, zinc, and selenium. The copper, arsenic, zinc, and selenium concentrations in the brine water discharges as reported by the discharger in its quarterly discharge monitoring reports are listed in Table 2. *Copper, Arsenic, Zinc, and Selenium Concentrations for Brine Concentrate Discharges from Quarterly Monitoring Reports.*

Because the arsenic, zinc, and selenium concentrations are in concentrations below receiving water quality criteria (except for selenium, on 05/22/2002, Table 2) the tentative Order does not include effluent limitations for these constituents. The CTR water quality criterion continuous concentration (CCC) for arsenic, zinc and selenium are 36 $\mu\text{g/L}$, 81 $\mu\text{g/L}$, and 71 $\mu\text{g/L}$

respectively. The CCC is a 4-day average concentration value. The CTR water quality criterion maximum concentration (CMC) for arsenic, zinc, and selenium as 69 $\mu\text{g/L}$, 90 $\mu\text{g/L}$, and 290 $\mu\text{g/L}$ respectively. The CMC is a short time period concentration value.

The tentative Monitoring and Reporting Program will continue to require quarterly monitoring for arsenic, zinc, and selenium concentrations in the brine concentrate discharges. The monitoring requirement will provide data to evaluate the chemical concentrations in the brine discharges and any potential impacts.

Table 2. Copper, Arsenic, Zinc, and Selenium Concentrations for Brine Concentrate Discharges from Quarterly Monitoring Reports.

Date	Copper ($\mu\text{g/L}$) dissolved	Arsenic ($\mu\text{g/L}$) dissolved	Zinc ($\mu\text{g/L}$) dissolved	Selenium ($\mu\text{g/L}$) dissolved
02/24/2000	4.8	ND	15.0	ND
03/22/2000	6.1	3.2	13.0	ND
05/16/2000	3.9	--	--	--
06/20/2000	8.7	ND	6.0	ND
08/23/2000	5.1	ND	ND	ND
10/18/2000	6.3	ND	ND	ND
03/27/2001	11.0	3.4	ND<25	ND<50
03/27/2001	2.6	--	--	--
04/26/2001	6.7	5.0	ND	ND
09/12/2001	1.2	5.1	71.6	12.9
11/14/2001	1.8	7.6	17.4	23.9
03/06/2002	2.3	11.0	44.0	56.0
03/28/2002	2.7	--	--	--
05/22/2002	2.5	15.3	8.9	73.2
08/21/2002	ND	ND	ND	ND
11/13/2002	ND	ND	ND	ND
03/05/2003	3.0	ND	ND	ND
05/14/2003	ND	ND	ND	ND
08/21/2003	ND	ND	ND	ND
11/19/2003	ND	ND	ND	ND

ND = not detected

As noted in Table 2, the copper concentrations in the brine discharges for 02/24/2000 through 04/26/2001 violated the effluent limitations for 3.1 $\mu\text{g/L}$ in Order No. 99-30. While investigating the alleged discharge violations, the discharger found that the laboratory conducting the copper analysis was experiencing interference in its analysis. By sending samples to different laboratories, Sweetwater Authority noted that other laboratories reported the same copper sample analysis as less than 3.1 $\mu\text{g/L}$, the CCC, and were in compliance. The CTR identifies the CMC for copper in saltwater as 4.8 $\mu\text{g/L}$ (dissolved).

Sweetwater Authority changed its contract laboratory. With a change in laboratory, the sampling data indicated that the brine discharge was in compliance with the discharge limitation of 3.1 $\mu\text{g/L}$ for copper as dissolved. The Chemist for the State Board, Bill Ray, and the Regional Board subsequently concurred that the brine concentrate discharge was in compliance with the dissolved effluent limitations in Order No. 99-30.

The RWD for the renewal of the NPDES permit included copper, arsenic, zinc, and selenium concentrations using the total recoverable method. The copper, arsenic, zinc, and selenium concentrations for the various discharges as submitted in the RWD for the permit renewal are listed in Table 3. *Copper, Arsenic, Zinc, and Selenium Concentrations in the Discharges as Total Recoverable.*

Table 3. Copper, Arsenic, Zinc, and Selenium Concentrations in the Discharges as Total Recoverable.

Discharge	Copper ($\mu\text{g/L}$)	Arsenic ($\mu\text{g/L}$)	Zinc ($\mu\text{g/L}$)	Selenium ($\mu\text{g/L}$)	Date	Comments
Demineralization brine	6.0 DNQ	10	9 DNQ	2	10/15/2003	
APW 1, 2, 3, 4 (composite)	11	8.4	5	0.7 DNQ	10/21/2003	
SDF 2, 3, 4, 5 (composite)	4.4	4.0	2	ND	10/16/2003	
SDF 1	14	1.9	3	ND	10/15/2003	
Outfall 1	53.0	5.6	36.0	27.0	Maximum daily value from 10 analyses	Form 2C
Outfall 2	31.0	3.4	30.0	14.0	Maximum daily value from 5 analyses	Form 2C
Outfall 3	20.0	33	31.0	11.0	Maximum daily value from 5 analyses	Form 2C
Outfall 4	7.7	4.3	80.1	15.0	Maximum daily value from 5 analyses	Form 2C
Outfall 5	11.0	11.1	180	20.2	Maximum daily value from 5 analyses	Form 2C
Outfall 6	36.0	12.7	190	20.2	Maximum daily value	Form 2C

Discharge	Copper ($\mu\text{g/L}$)	Arsenic ($\mu\text{g/L}$)	Zinc ($\mu\text{g/L}$)	Selenium ($\mu\text{g/L}$)	Date	Comments
					from 4 analyses	
Outfall 7	12.0	7.0	221	22.3	Maximum daily value from 5 analyses for copper, 4 analyses for others	Form 2C
Outfall 8	11.0	37.3	224	25.1	Maximum daily value from 5 analyses for copper, 4 analyses for others	Form 2C
Outfall 9	5.2	26.5	15	98.1	Maximum daily value from 5 analyses	Form 2C

DNQ = Detected not quantified, as defined by the Implementation Policy
SDF = San Diego Formation Wells

APW = Alluvial production wells
ND = not detected

Because the concentrations reported for metals in some of the groundwater well-purge water, plant feed-water dump, and pressure (air) relief valves discharges are higher than CTR criterion, the tentative Monitoring and Reporting Program will include quarterly monitoring requirements for copper, arsenic, zinc, and selenium for the these discharges. Each of these discharges is intermittent and short duration. Therefore, these discharges do not have effluent limitations. The monitoring requirements will provide additional data to evaluate potential impacts to receiving water quality.

Discharges of chlorine contact-tank overflow have not occurred and would only occur for specific incidents when the water in the tank could not be delivered to the potable water supply distribution system. The Monitoring and Reporting Program also includes quarterly monitoring requirements for this discharge.

Rationale for Storm Water Limitations

This facility is not subject to regulated pursuant to the General Industrial Storm Water Permit. However, the facility implements best management practices to abate polluted storm water discharges.

Rationale for Receiving Water Limitations

The receiving water limitations are provided in the *Rationale for WQBEL*.

CEQA and Administrative Requirements

Though the adoption of an NPDES permit for the discharges is exempt from California Environmental Quality Act (CEQA) pursuant to §13389 of the Porter-Cologne Water Quality Control Act, an Environmental Impact Report (EIR), dated May 1996, was prepared for this project to satisfy CEQA. Sweetwater Authority was the lead agency for the EIR. The EIR was reviewed during the development of Order No. 99-30.

The EIR noted that the project will not have a significant effect on the environment and that mitigation measures were made a condition of the approval of the proposed project. The EIR required the discharger to develop and implement a *Mitigation and Monitoring Program* (MMP) to evaluate potential impacts to the receiving waters and the environment. The MMP is used to evaluate potential impacts from nitrates in the discharge and to evaluate impacts from groundwater draft. The tentative Order will continue to require monitoring pursuant to the MMP.

Nutrients

The original NPDES permit, Order No. 99-30, includes monitoring requirements to evaluate potential eutrophication impacts from the demineralization brine discharge and from the groundwater well-purge water discharge. The tentative Order includes an effluent limitation, based on the MMP and best professional judgment, for nitrate, as N (5.0 mg/L). The tentative Order continues monitoring and evaluating the receiving waters for potential impacts from nutrients.

The maximum daily limit for mass loading rate for nitrate, as N is 33 pounds/day. The maximum daily limit for mass loading rate is calculated by multiplying the daily flow times the conversion factor of 8.34 rate times the concentration (in parts per million).

$$\text{Pounds/day} = 0.800 \text{ mgallons/day} * 8.34 \text{ pounds/gallon} * 5.0 \text{ parts/million}$$

The Basin Plan contains the following prohibition, which is included in the *Receiving Water Limitations C.1.b.* of the tentative Order:

San Diego Bay waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.

NPDES Rating, and Threat to Water Quality and Complexity Rating

Pursuant to the *NPDES Permit Rating Worksheet*, the discharge from the Groundwater Demineralization facility and appurtenances has a point score of 25. Accordingly, the discharge is classified as an NPDES *Minor Discharger*.

The reported flow rates for the discharges at the Demineralization Facility are listed in *Table 1. Outfall Locations and Descriptions*. The Threat to Water Quality and Complexity (TTWQ/CPLX) rating for this facility is 2/C.

Basis for Conditions in tentative Order No. R9-2004-0111

Non-municipal Waste Discharge to an Enclosed Bay and Estuary

The State Water Resources Control Board (hereinafter State Board) adopted the *Water Quality Control Policy for Enclosed Bays and Estuaries of California (Bays and Estuaries Policy)* on May 16, 1974. The *Bays and Estuaries Policy* establishes principles for management of water quality, quality requirements for waste discharges, discharge prohibitions, and general provisions to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries. These principles, requirements, prohibitions, and provisions have been incorporated into this Order.

The *Bays and Estuaries Policy* contains the following principle for management of water quality in enclosed bays and estuaries, which includes San Diego Bay:

The discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Board only when the Regional Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge. For the purpose of this policy, treated ballast waters and innocuous nonmunicipal wastewater such as clear brines, washwater, and pool drains are not necessarily considered industrial process wastes, and may be allowed by Regional Boards under discharge requirements that provide protection to the beneficial uses of the receiving water.

For the purpose of the *Bays and Estuaries Policy* and the tentative Order, the discharge of reverse osmosis brine water, groundwater well-purge water, plant feed-water dump, pressure (air) relief valves, and chlorine contact-tank overflow are considered innocuous nonmunicipal wastewaters and, as such, will not be considered industrial process wastes. The discharges of such wastes may be allowed by the Regional Board under waste discharge requirements that provide protection of the beneficial uses of the receiving waters.

Beneficial Uses of San Diego Bay

The tidal prism of the Sweetwater River is considered by the Basin Plan (p. 2-47, Table 2-3. Beneficial Uses of Coastal Waters) to be a segment of San Diego Bay. The Basin Plan established the following beneficial uses for the waters of San Diego Bay:

- a. Industrial Service Supply,
- b. Navigation,
- c. Contact Water Recreation,
- d. Non-contact Water Recreation
- e. Commercial and Sport Fishing,
- f. Preservation of Biological Habitats of Special Significance,
- g. Estuarine Habitat,
- h. Wildlife Habitat,
- i. Rare, Threatened, or Endangered Species,
- j. Marine Habitat,
- k. Migration of Aquatic Organisms, and
- l. Shellfish Harvesting.

Beneficial Uses of the Lower Sweetwater River

The Basin Plan has established the following beneficial uses for the waters of the Lower Sweetwater River (909.12):

- a. Industrial Service Supply,
- b. Contact Water Recreation,
- d. Non-contact Water Recreation,
- e. Warm Freshwater Habitat, and
- f. Wildlife Habitat.

Toxicity

The tentative Order does not include an effluent limitation for toxicity. The tentative Order includes numerical effluent limitations for copper, the only chemical identified as having a concentration that may cause toxicity or an exceedence of water quality criteria.

Prohibitions

The applicable prohibitions from the Basin Plan, and the Enclosed Bays and Estuary Policy are incorporated into the tentative Order and tentative MRP. As noted previously, the Basin Plan and the Enclosed Bays and Estuary Policy directly apply to the proposed discharge.

Public Hearing

Tentative Order No. R9-2004-0111 will be considered by the San Diego Regional Board at a public hearing on:

Wednesday, June 9, 2004 beginning at 09:00

at the following location:

**Water Quality Control Board
Regional Board Meeting Room
9174 Sky Park Court
San Diego, California**

Review of tentative Order No. R9-2004-0111

Copies of the tentative Order and other documents (other than those that the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying according to the following schedule (except holidays):

Monday and Thursday:	1:30 p.m. to 4:30 p.m.
Tuesday and Wednesday:	8:30 a.m. to 11:30 a.m. and 1:30 p.m. to 4:30 p.m.
Friday:	8:30 a.m. to 11:30 a.m.

An electronic copy of the Fact Sheet and Order can be accessed on the Regional Board website at <http://www.swrcb.ca.gov/rwqcb9/>.

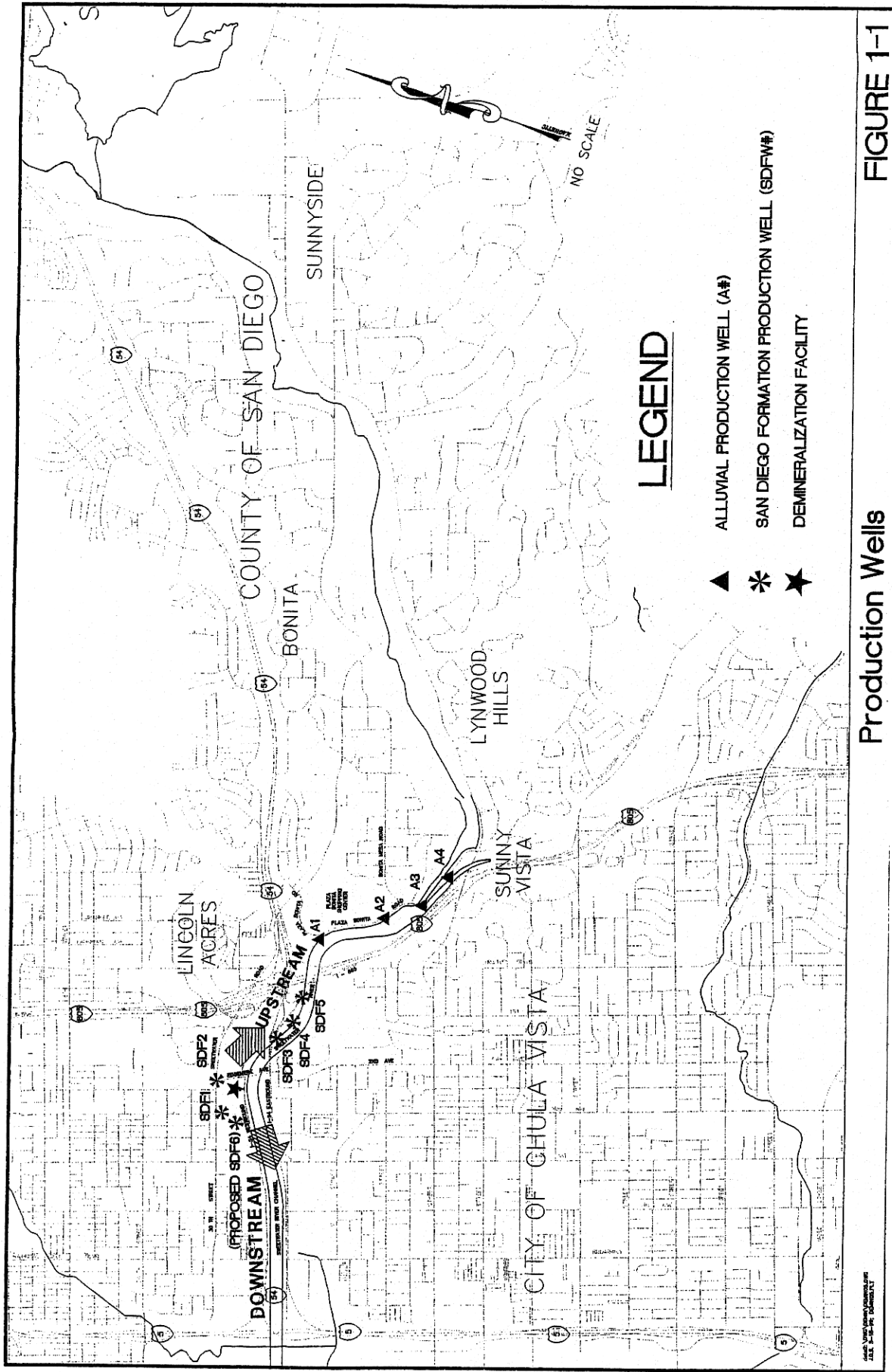
Additional Information

For additional information regarding tentative WDR No. R9-2004-0111, interested persons may write to the following address or call Mr. Paul J. Richter of the Regional Board staff at (858) 627-3929 or by e-mail at richp@rb9.swrcb.ca.gov.

Regional Water Quality Control Board, San Diego
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San Diego, California 92123-4340

REFERENCES

1. California Toxics Rule, Federal Register Section 31682-31719, 40 CFR 131.38, Thursday, May 18, 2000.
2. Order No. 99-30, NPDES Permit No. CA0108952, Addendum No. 1 to Order No. 99-30, and associated monitoring reports and documents in File #02-858.01/.02.
3. Personal communication, e-mail with Mr. James Maughan, Senior Water Resource Control Engineer, SWRCB, and Mr. Carl Henriet, Sanitary Engineering Associate, SWRCB. March 22, 2004.
4. Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Phase I of the Inland Surface Waters Plan and the Enclosed Bays and Estuaries Plan, 2000.
5. Report of Waste Discharge, Sweetwater Authority, dated December 4, 2004 and supplemental information dated February 23, 2004.
6. Technical Support Document for Water Quality-Based Toxics Control, EPA/505/2-90-001. Second Printing. March 1991.
7. The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion. EPA/823/B/96/007. June 1996.
8. U.S. EPA NPDES Permit Writers' Manual. EPA/833/B-96/003. December 1996.
9. Water Quality Control Plan for the San Diego Basin (9), 1994 (Basin Plan) and amendments thereto.



ATTACHMENT A
FACT SHEET for TENTATIVE ORDER No. R9-2004-0111

